AMENDMENT(S) TO THE CLAIMS

1-16 (cancelled)

17. (currently amended) An electric motor drive, comprising:

a stator;

a hollow non-rotary shaft carrying said stator;

a plurality of bearings connected to said non-rotary shaft;

a rotor rotatably positioned around said stator, said rotor being rotatably carried by said bearings; and

a machine actuator having a functional part with a short circuit arrangement associated with said rotor for operating said actuator, said short circuit arrangement includes hollow short circuit conductors connected to said rotor, said hollow short circuit conductors being in fluid communication with an external airflow source by way of the hollow portion of said hollow non-rotary shaft.

18. (previously presented) The electric motor drive of claim 17, wherein said hollow short circuit conductors and said rotor are integrally formed.

19. (previously presented) The electric motor drive of claim 17, further comprising a conveyor driving roll, wherein said functional part is said conveyor driving roll.

20. (previously presented) The electric motor drive of claim 17, further comprising:

a conveyor driving roll, said functional part being said conveyor driving roll;

a plurality of short circuiting bars; and

a plurality of rings, said short circuiting bars and said rings being arranged integral with said rotor;

wherein said short circuiting bars and said rings are said short circuit arrangement.

21. (previously presented) The electric motor drive of claim 17, wherein said rotor is an electrically conductive compound metal structure including at least copper short circuit conductors which are attached to said rotor by one of explosive welding, butt welding into holes in said rotor and integral with the casting of said rotor.

22. (previously presented) The electric motor drive of claim 17, wherein said stator includes a winding, and further comprising star type couplings utilized in said winding of said stator, wherein said winding includes one of a three pole stator winding, a four pole stator winding and a six pole stator winding, wherein said motor has a power output from approximately 0.5 kilowatt to approximately 500.0 kilowatt, and wherein said motor has a rotational speed of approximately 0 rpm to approximately 20,000 rpm.

23. (previously presented) The electric motor drive of claim 17, further comprising:

a frequency transformer drive; and

an active rotation speed control.

24. (withdrawn) A method of constructing an electric motor drive comprising the steps of:

mounting a stator on a hollow non-rotary shaft;

positioning a rotor around said stator;

connecting said rotor to said non-rotary shaft with bearings; and

incorporating a short circuit arrangement into said rotor, said short circuit arrangement being at least one of hollow and solid short circuit conductors explosion welded to said rotor;

wherein said rotor is configured as a functional part of a machine actuator.

25. (withdrawn) The method of claim 24, wherein said short circuit arrangement is a plurality of rings and a plurality of short circuiting bars, said plurality of rings and said plurality of short circuiting bars arranged at least partially internal to said rotor.

26. (withdrawn) The method of claim 24 further comprising the step of forming said rotor into an electrically conductive compound metal structure including at least copper short circuit conductors which are attached to said rotor by one of explosive welding, butt welding into holes in said rotor and integral with the casting of said rotor.